STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

ORDER NO. R4-2005-XXXX

REVISED WASTE DISCHARGE REQUIREMENTS FOR WASTE DISPOSAL, ASSESSMENT MONITORING PROGRAM, AND CORRECTIVE ACTION PROGRAM

COUNTY SANITATION DISTRICT OF LOS ANGELES COUNTY (PUENTE HILLS LANDFILL) (FILE NO. 57-220)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), finds:

BACKGROUND

- 1. The County Sanitation Districts of Los Angeles County (Discharger) owns and operates the Puente Hills Landfill (Landfill), a 1,365-acre Class III waste disposal facility located at 2800 Workman Mill Road, in an unincorporated area of Los Angeles County, California (see Figure 1, attached). The Discharger acquired the original 1,214-acre Landfill site in June 1970. At the time the land was acquired, 500 acres were being leased to the San Jose Development Company for the purposes of operating a solid waste disposal site. This disposal site was known as the San Gabriel Valley Dump (SGVD), which operated at this location as early as 1957. As part of the sale agreement, the Discharger took over the operation of the SGVD and renamed the Landfill. The Discharger continued operation of the Landfill under existing Zone Exemption Case No. 3152-(1), granted by the County of Los Angeles Regional Planning Commission on November 19, 1957. In May 1981, the Discharger acquired an additional 151 acres of land adjacent to the Landfill, immediately south of the Pomona Freeway, bringing the total area of the Landfill to its present 1,365 acres.
- 2. On January 31, 1958, Industrial Waste Permit No. 1918 was issued to the SGVD by the Los Angeles County Engineer, and approved by the Regional Board on April 10, 1958.
- 3. On April 23, 1959, the Regional Board adopted Resolution No. 59-34, prescribing waste discharge requirements (WDRs) for the disposal of non-hazardous solid and certain "semi-liquid" wastes, and inert wastes at the SGVD.
- 4. On July 27, 1972, the Regional Board adopted Monitoring and Reporting Program (M&RP) No. CI-2294 for the SGVD, thereby amending Resolution No. 59-34.













- 5. In 1980, the United States Environmental Protection Agency (USEPA) promulgated a rule exempting household wastes from all Resource Conservation and Recovery Act (RCRA) requirements for hazardous wastes (title 40 of the Code of Federal Regulations [40 CFR] section 261.4(b)(1)). USEPA interpreted this exemption to extend to the residuals from the treatment of household wastes, including ash from the combustion of household wastes.
- 6. On April 12, 1983, the Regional Board revised M&RP No. CI-2294 to include updated monitoring and reporting procedures, including dewatered sewage sludge sampling, analyses, and reporting.
- 7. On November 1, 1983, the Los Angeles County Department of Regional Planning issued Conditional Use Permit (CUP) No. 2235-(1) allowing for the expansion of the Landfill waste management unit footprint beyond the area provided in Zone Exemption Case No. 3152-(1). This CUP limited waste disposal to approximately 700 of the Landfill's 1,365 acres, and allowed for disposal operations for a ten-year period that would expire on November 1, 1993.
- 8. Between 1982 and 1984, prior to the construction of the Commerce Refuse-To-Energy Facility (CREF), owned by the Discharger, and the Southeast Resource Recovery Facility (SERRF), owned by the City of Long Beach, the Discharger applied to the Department of Health Services (DHS) to have incinerator ash from CREF and SERRF classified as non-hazardous waste. By 1984, DHS had classified the incinerator ash from both facilities as non-hazardous, effectively allowing disposal at the Landfill.
- 9. In 1984, the United States Congress added section 3001(i) to RCRA, which addressed waste to energy (WTE) facilities that burned exempt household hazardous wastes and nonhazardous commercial and industrial wastes to produce energy. In July 1985, USEPA promulgated a rule that codified section 3001(i). In the preamble accompanying this rule, USEPA announced that it interpreted the statute to exempt the combustion of waste, but not the management of ash, from Subtitle C of 40 CFR, which contains federal hazardous waste regulations. In September 1992, USEPA Administrator William Reilly signed a memorandum announcing that the USEPA interpreted section 3001(i) to exempt from all Subtitle C requirements ash from WTE facilities burning household wastes and nonhazardous wastes.
- 10. In 1984, section 25143.5(d) was added to the California Health and Safety Code (HSC), which effectively prohibited the DHS from changing the classification of incinerator ash from non-hazardous to hazardous unless there was a significant change in the combusted waste, the manner of combustion, or the management of the ash residue, even if, as was often the case for CREF and/or SERRF, the ash exceeded regulatory thresholds for metals.
- 11. On April 28, 1987, the Discharger entered into an agreement with the County of Los Angeles Department of Parks and Recreation that designated as open space in perpetuity



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those portions of the Landfill on which solid waste fill had been or would be placed.

- 12. A solid waste assessment test (SWAT) analysis, consistent with the requirements of section 13273 of the CWC was conducted in 1987 for the Landfill and was approved by the Executive Officer on June 11, 1990. Results from the SWAT investigation indicated the presence of low levels organic compounds in the Main Canyon area of the Landfill consistent with concentrations resulting from contact with landfill gas.
- 13. On April 23, 1989, the Regional Board adopted Order No. 89-032 authorizing expansion into the Canyon 9 area (see Figure 2, attached), amending the Landfill's WDRs, and rescinding Resolution 59-34. The proposed design and engineering features of the Canyon 9 area included subdrain systems, a compacted clay liner system, leachate collection and removal system (LCRS) (see Figure 3, attached), as well as unsaturated zone monitoring systems, a subsurface barrier, and groundwater monitoring systems.
- 14. Regional Board Order No. 89-032 authorized interim disposal of incinerator ash at the Landfill from CREF and SERRF until March 27, 1990. Order No. 89-032 allowed the Discharger and City of Long Beach time to propose and implement treatment procedures that would modify the incinerator ash to be in compliance with Regional Board requirements.
- 15. On March 26, 1990, the Regional Board adopted Order No. 90-046 to extend the deadline for interim disposal of incinerator ash at the Landfill until March 25, 1991. Regional Board Order No. 90-046 rescinded Order No. 89-032.
- 16. On March 4, 1991, the Regional Board adopted Order No. 91-035, which amended Order No. 90-046 with regard to requirements for disposal of incinerator ash at the Landfill and extended the deadline for interim disposal of incinerator ash at the Landfill until June 30, 1992.
- 17. In 1991, during preparation for the potential closure of the Landfill, the Discharger initiated a program to demonstrate that existing intermediate cover was equivalent to an alternative final cover in compliance with California Code of Regulations (CCR), title 23, chapter 15 (Chapter 15) requirements. The Discharger completed modeling and field investigations on approximately 180 acres of the then existing side-slope intermediate cover in the Main Canyon and Canyon 9 areas of the Landfill (see Figure 4, attached) to demonstrate equivalent performance to a Chapter 15 prescriptive final cover system. In May 1993, the Regional Board and California Integrated Waste Management Board (CIWMB) approved the Discharger's demonstration of the alternative final cover for the existing side-slopes.
- 18. In October 1991, California Senate Bill 50 added section 25143.4 to the HSC effectively removing the language of section 25143.5(d) from the HSC on September 30, 1992, so that the DHS would be free to reclassify incinerator ash as hazardous without statutory









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restriction.

- 19. On January 23, 1992, the State Water Resources Control Board (State Board) adopted Order No. WQ 92-02 responding to a petition by state Senator Art Torres to review Order No. 91-035. In summary, Order No. WQ 92-02 reaffirmed the prohibition against the discharge of untreated ash at the Landfill after September 30, 1992, required the Regional Board to issue a cease and desist order requiring compliance if the September 30, 1992 time schedule was not met, expanded on Order No. 91-035 to limit the disposal of untreated incinerator ash to only the lined Canyon 9 area of the Landfill, and required that untreated ash disposal be segregated to the maximum extent possible.
- 20. On November 25, 1992, the Sanitation District No. 2 Board of Directors certified a final EIR (SCH No. 91121070), in accordance with CEQA requirements, and approved a 100-acre expansion of the waste management facility into the Eastern Canyons area of the Landfill. The EIR determined that expansion of the Landfill would have potential adverse groundwater impacts would be mitigated by engineered features of the Landfill and by the provisions in the Landfill's WDRs.
- 21. On April 6, 1993, the DTSC requested that a new application be made for an updated nonhazardous classification to reflect current information for treated CREF and SERRF incinerator ash.
- 22. On June 25, 1993, in response to the DTSC's April 6, 1993 request, Mittelhauser Corporation submitted a waste classification application for CREF and SERRF incinerator ash to the DTSC on behalf of the Discharger and City of Long Beach. The application concluded that the ash was nonhazardous due to intrinsic mitigating physical and chemical characteristics.
- 23. On July 20, 1993, the Los Angeles County Board of Supervisors issued CUP No. 92-250-(4) to the Discharger which provided for the lateral and vertical expansion of the waste management facility for ten years, or upon completion of the approved fill design, whichever came earlier. The approved fill design allowed placement of approximately 37 million tons of refuse over the existing 530-acre waste management facility and an expanded 100-acre portion of the Eastern Canyons area (Figure 2, attached).
- 24. On October 26, 1993, the Regional Board's Executive Officer (Executive Officer), based on a request from the Discharger, clarified that treated municipal incinerator ash from CREF and SERRF may be disposed at any Class III landfill within the jurisdiction of Los Angeles Regional Water Quality Control Board. The disposal could occur in the same manner as any other nonhazardous waste, provided that: 1) the DTSC continues to determine that the ash is nonhazardous; 2) the treated ash does not contain soluble pollutants in concentrations which exceed applicable water quality objectives or cause degradation to the waters of the State; and 3) the treated ash is subject to a monitoring and reporting program issued by the

















Regional Board.

- 25. In September 1993, the EIR (see Finding No. 20, above) was challenged in Los Angeles County Superior Court in two separate lawsuits brought by the Hacienda-La Puente School District, et al., and RR&C Development Corporation. During the litigation relating to the EIR challenge, the Los Angeles County Superior Court issued a ruling on October 5, 1993, allowing the continued operation of the Landfill in the area provided under CUP No. 2235-(1) until the litigation was resolved. Ultimately, the Los Angeles County Superior Court found that the final EIR was legally adequate with the exception that additional information about groundwater quality was required. Accordingly, the court entered a judgment requiring the Discharger to prepare a supplement to the final EIR addressing groundwater quality issues.
- 26. On November 1, 1993 the Regional Board adopted Order No. 93-070, prescribing requirements for, and authorizing the expansion of waste management facilities to the Eastern Canyons area of the Landfill. The monitoring and reporting program for the expansion was implemented under M&RP No. CI-7336. The proposed design and features of the Eastern Canyons area included a subdrain and groundwater collection system, a composite liner system, a LCRS (see Figure 3, attached), as well as subsurface barriers and extraction systems, and groundwater and unsaturated zone monitoring systems. These systems would be constructed to the prescriptive or equivalent performance standards of emerging federal regulations for municipal soils waste landfills, commonly referred to as "Subtitle D".
- 27. In response to the order from the Los Angeles County Superior Court (see Finding No. 25, above), a supplement was released by the Discharger on December 3, 1993, for public and agency review. As the lead agency responsible for monitoring groundwater quality at the Landfill, and as a responsible agency for reviewing the EIR, Regional Board staff reviewed the supplement, and made minor comments. The Regional Board found that the supplement contained a detailed analysis of groundwater data, already in the Regional Board's files, which the Regional Board had considered in issuing Order No. 93-070. The supplement was certified by the Discharger's board of directors on March 23, 1994. The Discharger concluded in the supplement that the Landfill project, as mitigated, would not have a significant effect on groundwater quality. On June 20, 1994, the Los Angeles County Superior Court found that the supplement complied with CEQA and with previous rulings. Upon resolution of the litigation, on August 30, 1994, the Los Angeles County Board of Supervisors reissued CUP No. 92-250-(4).
- 28. On May 2, 1994, the United States Supreme Court issued a decision in City of Chicago v. Environmental Defense Fund, Inc. holding that, although municipal WTE facilities that burn household wastes alone, or in combination with nonhazardous wastes from industrial and commercial sources, are exempt from regulation as a hazardous waste treatment, storage, or disposal facility under Subtitle C of RCRA, the ash that they generate is not

exempt. The Supreme Court, however, did not specify the point at which the ash generated by the WTE facility becomes subject to Subtitle C. On February 3, 1995, the USEPA, in response to numerous requests for resolution of this issue, interpreted section 3001(i) of RCRA to first subject the ash generated by a WTE facility to RCRA Subtitle C when it exits the combustion building following the combustion and air pollution control processes.

- 29. On September 26, 1994, the Regional Board adopted Order No. 94-103 to amend the findings in Order No. 93-070 with regard to the legal challenge to the Eastern Canyons expansion. Specifically, Order No. 94-103 found that reopening of Order No. 93-070 was not warranted.
- 30. On November 7, 1994, in a response letter to the Discharger's waste classification application, the DTSC recommended additional tests in order to obtain more data regarding the mitigating physical and chemical characteristics of CREF incinerator ash. The DTSC stated that the recommended tests were draft procedures being considered for proposal in future DTSC regulations.
- 31. On March 1, 1995, the Discharger amended the 1993 waste classification application with new information reflecting operational changes at the CREF that had altered the waste stream, thereby improving incinerator ash treatment results. Also, more appropriate data handling procedures recommended by USEPA were used to reanalyze previously submitted information. The reanalysis of the data showed that specified results were significantly lower.
- 32. By March 7, 1995, Bonnie Heimbecher, Robert B. Isaacson, Virgil J. Jose, Carol Mauceri, Jeffrey K. Yann and RR&C Development Company had completed a petition to the State Board seeking review of Regional Board Order No. 94-103. Among other contentions, the petitioners contended that the Regional Board had not adequately responded to evidence of releases from the Landfill. Volatile organic compounds (VOCs) had previously been detected in groundwater monitoring wells downgradient of the Main Canyon area of the Landfill. Order No. WQ 96-10, adopted by the State Board on May 29, 1996, required the Discharger to implement an adequate corrective action program (CAP) at the Landfill in compliance with Regional Board Order No. 90-046, Provision C.6.
- 33. In 1995, the DTSC initiated a new project, the Regulatory Structure Update (RSU), which addressed classification of wastes including ashes. The DTSC advised the Discharger that they would not finalize the draft testing procedures of the type recommended in their November 7, 1994 letter. Instead, any new test procedures would be developed through the RSU project. Because the DTSC anticipated changes in their waste classification procedures, they advised the Discharger that a new ash classification would not be made during the RSU project.
- 34. In 1998, section 25157.8 was added to the HSC that restricted the discharge of waste

















streams with metal levels exceeding specified limits to municipal solid waste facilities. On August 19, 1998, in response to a request from the Discharger for the DTSC's interpretation of this change with respect to CREF incinerator ash, the DTSC indicated that the HSC change allowed the continued disposal of waste streams classified as nonhazardous at a solid waste facility having WDRs and a facility permit that allowed for disposal of that waste.

- 35. On June 30, 1999, the Regional Board adopted Order No. 99-059 implementing a CAP for the Main Canyon area of the Landfill.
- 36. In 1999, the DTSC discontinued the RSU project thereby leaving the DTSC's existing waste classifications unchanged.
- 37. On December 18, 2002, the Los Angeles County Regional Planning Commission approved CUP 02-027-(4). The total design capacity for the Landfill, including refuse and daily cover is 68.8 million cubic yards. The remaining Landfill life is constrained by CUP 02-027-(4) to November 1, 2013.
- 38. On January 23, 2002, the Discharger's Board of Directors, as lead agency under CEQA, certified a final EIR (SCH No. 2000041066) for the continued operation of the Landfill. The Discharger applied for a CUP with the County Department of Regional Planning on February 14, 2002. The CUP application provides for the acceptance of approximately 38 million tons of refuse beyond the expiration of CUP No. 92-250-(4) on October 31, 2003, as depicted on Figure 5 (see attached), at continued disposal tonnage levels of 72,000 tons per week or 13,200 tons per day. The continued operation project includes a minor expansion of the Landfill's waste management facility consisting of twelve acres in the upper portion of the Main Canyon area, known as the Nike Slopes area.
- 39. On February 6, 2003, the Discharger submitted to the Regional Board a Joint Technical Document (JTD), which is a consolidated permit application under 27 CCR, to incorporate regulatory requirements of both a solid waste facilities permit per the CIWMB and WDRs per the Regional Board for continued operation of the Landfill. The proposed design and features of the continued expansion in the Eastern Canyons area include expanded groundwater collection systems, composite liner systems, and LCRSs to those depicted in Figure 3 (attached). Subsurface barriers and extraction systems, and groundwater and unsaturated zone monitoring systems already exist as part of the initial Eastern Canyons area expansion.
- 40. The Landfill will continue to operate as a modified "cut and cover" side hill landfill. Soil, for use as cover, is excavated within the Landfill property, or provided by reclaiming clean dirt loads from the incoming waste stream. Refuse is spread and compacted in cells approximately eighteen to twenty feet in height. On the exterior face of the Landfill, soil is placed at a minimum thickness of seven feet normal to the front face (fifteen feet on the

















horizontal). An approximately fifteen-foot wide bench is constructed approximately every 40 vertical feet to provide slope stability, drainage and access for maintenance. This design provides for proper grading and drainage of surface water to eliminate ponding of such water on the Landfill.

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41. The CIWMB has approved the Discharger to use shredded greenwaste, shredded woodwaste from construction and demolition debris, foam, and thermodegradable film as alternative daily cover materials for use at the Landfill. The Discharger may evaluate the use of other materials as alternative cover materials in the future.

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42. This Order includes the attached definition of terms and acronyms (Attachment 1).

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ENVIRONMENTAL SETTING

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- 43. The Landfill is located at the northwestern tip of the western Puente Hills. The Puente Hills, in the vicinity of the Landfill, are bounded on the east and north by the San Jose Creek floodplain, on the north and northwest by the San Gabriel River floodplain, and on the southwest by inter-fingering alluvial fans formed from west to southwest flowing intermittent creeks. The area can generally be characterized as unconsolidated materials at lower elevations surrounding areas of elevated marine sedimentary bedrock.
- 44. The Landfill is underlain by three Miocene-aged bedrock formations (Puente, Pico and Repetto) and Quarternary to Recent-aged surficial deposits. The bedrock formations, each averaging approximately 1,100 feet in thickness, consist of interbedded conglomerates, sandstones, siltstones, and shales. Canyon waters, where present, move at slow rates through the canyon alluvium and in weathered bedrock, creating low-permeability perched and semi-perched zones. The surficial units are typically thirty feet in thickness, or less, and act as semiperched aquifers for canyon waters, which percolate down-slope. Artificial engineered fill is present both as veneers and massive fill deposits.
- 45. On June 13, 1994, this Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan (including its subsequent amendments) designates beneficial uses and water quality objectives for the area of the Landfill. The requirements in this Order, as they are met, are in conformance with the goals of the Basin Plan.
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- 46. The Landfill is located within the eastern part of the Main San Gabriel River Groundwater Basin, which is part of the San Gabriel Valley Groundwater Basins (see Figure 6, attached). The Basin Plan identifies beneficial uses for both surface and groundwaters in the Main San Gabriel River Basin as municipal and domestic supply, industrial service supply, industrial

process supply, and agricultural supply. The Landfill does not directly overlie a groundwater basin, however perched and semi-perched canyon waters potentially drain into the Main San Gabriel River Basin. The following are water quality objectives established in the Basin

Plan for groundwater in the Main San Gabriel River Basin:

Constituents	Units	Maximum Value
TDS	milligrams per liter (mg/L)	3,000
Sulfate	mg/L	1,700
Chloride	mg/L	230
Boron	mg/L	2.0

In addition, the Basin Plan indicates that water designated for use as domestic or municipal supply shall not contain concentrations of chemical constituents in excess of the limits specified in provisions of title 22 of the CCR, including section 64431 for inorganic chemicals, section 64431 for fluoride flouride, and section 64444 for organic chemicals.

- 47. The Landfill is located within the Main San Gabriel Hydrologic Subarea of the Los Angeles San Gabriel Hydrologic Unit. The Basin Plan identifies potential beneficial uses for municipal and domestic supply and water contact recreation, and intermittent beneficial uses for groundwater recharge, non-contact recreation, and warm freshwater habitat. The beneficial uses of surface waters in the unnamed canyons (see Finding No. 43 above) of the Landfill are not individually identified in the Basin Plan, however application of the tributary rule requires the beneficial uses of any specifically identified water body apply to its tributary streams. The requirements in this Order, as they are met, are in conformance with beneficial uses identified in the Basin Plan for canyons/streams at the Landfill that are tributary to Main San Gabriel Hydrologic Subarea of the Los Angeles San Gabriel Hydrologic Unit.
- 48. There are no known active faults within 200 feet of the Landfill. Active faults are defined as Holocene epoch faults that have exhibited surface movement in the last 11,000 years. The nearest active fault, a northwestern segment of the Whittier Fault Zone, is approximately 2.5 miles from the Landfill at its closest approach. Near the northwestern end of the fault zone are two branches, the Workman Hill and Whittier Heights Faults, which are not known to be active. The Whittier Heights fault passes through the center of the Eastern Canyon expansion of the Landfill. The Whittier Heights fault shows evidence that its most recent activity was during late Quaternary time (3 million years ago).
- 49. Results of a seismic design investigation performed by the Discharger's consultant (GeoSyntec Consultants, 2002) indicate that the seismic sources that govern seismicity at the Landfill are either a moment magnitude 6.8 event on the Whittier Fault for a "near-field" maximum credible earthquake (MCE) design event, or a moment magnitude 7.8 event on the San Andreas Fault for a "far-field" MCE design event. A moment magnitude 6.8 event on the Whittier Fault located as close as 2.5 miles from the Landfill could generate a free-field bedrock peak horizontal ground acceleration (PHGA) of 0.60 g and have a duration of shaking of 11.7 seconds. For the San Andreas Fault, a moment magnitude 7.8 event located as close as 30.3 miles from the Landfill could generate a free-

















field bedrock PHGA of 0.12 g but have a duration of shaking of 30.9 seconds. The MCE design events exceed maximum probable earthquake (MPE) design criteria that is the minimum requirement contained in 27 CCR.

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- 50. Seismic Hazard Zone Maps for the El Monte, Whittier, Baldwin Park, and La Habra 7.5 minute quadrangles (released March 25, 1999, March 25, 1999, March 25, 1999, and April 15, 1998, respectively) produced by the California Division of Mines and Geology Seismic Hazards Mapping Program (incorporated herein by reference) indicate that proposed operational areas at the Landfill are located outside identified liquefaction zones. The hazard zone maps also identify areas where the previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions, indicate a potential for permanent ground displacements such that mitigation is required. The El Monte map shows that the upper portion of the Main Canyon area (see Finding No. 38, above) where expansion of the Landfill is proposed is located within an earthquake-induced landslide zone.

51.

- The Landfill is generally bounded by the City of Industry to the north, the unincorporated community of Hacienda Heights to the east, and the City of Whittier to the south, and unincorporated Los Angeles County to the west. The San Gabriel River Freeway and San Gabriel River physically separate the Landfill from the cities of South El Monte and Pico Rivera to the north and west, respectively. The cities of South El Monte, Pico Rivera and Whittier are predominately residential and commercial/industrial communities. The City of Industry general plan has only land use designations of commercial and industrial. The land use element of the Hacienda Heights community general plan includes policies designed to retain the single-family residential community character of the area and maintain the hillsides in a natural state. Other major surrounding land uses in area of the Landfill are Rio Hondo College, Whittier Narrows Recreation Area, Rose Hills Memorial Park, and open space in the Puente Hills. Figure 7 (see attached) shows land uses in the vicinity of the Landfill property.
- 52. The Landfill is located within the South Coast Air Basin which is comprised of a coastal plain with broad valleys and low hills whose climate is dominated by the semi-permanent, high-pressure climatic conditions of the eastern Pacific zone. The area is characterized by warm, dry summers, mild winters, infrequent rainfall, moderate daytime on-shore breezes and moderate humidity. Rainfall data recorded using an on-site rain gauge between 1988 through 2001 yielded an average annual precipitation of 17.6 inches with 88% of the rainfall occurring between November and March and little rainfall during summer months. Evaporation data for the region, recorded between October 1969 and September 2001 at the San Dimas Dam weather monitoring station by the Los Angeles County Department of Public Works Water Resources Division indicates a mean annual evaporation rate of approximately 52.0 inches.
- 53. According to the National Flood Insurance Program, administered by the Federal

Emergency Management Agency, the Landfill is in an area classified as Zone C, designating the absence of a flood hazard.

54. Portions of the Landfill were formerly parts of the North Whittier Heights Oil Field, which was active from the early 1900's to 1970. All known abandoned oil and water wells on the Landfill have been properly decommissioned according to appropriate Division of Oil and Gas (now the Division of Oil, Gas, & Geothermal {PRIVATE "TYPE=PICT;ALT="} Resources) guidelines. These wells were identified through a commissioned study titled "Report of Geologic and Hydrogeologic Studies, Puente Hills Landfill Site" (LeRoy Crandall and Associates, October 9, 1981). Some improperly decommissioned wells may remain for which no records exist. This Order specifies that upon discovery of any such wells they will be properly decommissioned according to the appropriate Oil, Gas, & Geothermal {PRIVATE "TYPE=PICT;ALT="}Resources requirements.

ENVIRONMENTAL MONITORING SYSTEMS

- 55. The proposed engineered containment features of the expanded Landfill, as described in the JTD, will be constructed to the prescriptive standards of 27 CCR and/or 40 CFR or equivalent performance standards. This Order specifies that final design and construction methods for proposed engineered systems be reviewed and approved by the Executive Officer prior to installation and use.
- 56. The Discharger has constructed five subsurface barrier systems at the Landfill (see Figure 8, attached), using approved excavation and construction methods. The systems include upgradient groundwater extraction systems, a low permeability cut-off wall or barrier having a design hydraulic conductivity of $1x10^{-6}$ centimeters per second (cm/sec) and a minimum thickness of twelve inches, and downgradient monitoring wells (see Figure 9, attached). The low permeability cut-off walls for Barriers Nos. 1 through 5 are cement-bentonite (slurry trench) barriers.
- 57. 27 CCR section 20260 requires a site operator to install a low permeability clay liner when site characteristics alone are not adequate to ensure protection of the quality of groundwater. The Discharger has constructed liner systems under all expansion areas constructed after the approval of CUP No. 2235-(1) that generally consist of (from bottom to top), a clay liner, a synthetic liner, a blanket LCRS, and a protective layer of soil (see Figure 3, attached), overlying a subdrain system.
- 58. The Discharger continues to implement a waste-load checking program to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable materials. Hazardous materials are temporarily stored in a dedicated hazardous waste storage area and disposed of at an appropriate hazardous waste facility according to hazardous waste laws.
- 59. The Landfill groundwater monitoring program incorporates monitoring wells that are

















sidegradient, and/or downgradient of the Landfill (see Figure 10, attached). Groundwater monitoring at the Landfill has been conducted since 1983.

- 60. Direct monitoring of background groundwater quality in the Main Canyon area was not completed because landfilling operations, which commenced in 1957, preceded groundwater monitoring in this area. The Discharger has established ranges of background groundwater quality at the Landfill, principally by monitoring groundwater wells in the Canyon 9 and Eastern Canyons areas prior to commencing landfilling operations in these areas [Puente Hills Landfill Eastern Canyons Groundwater Quality Detection Monitoring Program, February 1998]. These investigations establish that background monitoring points for inter-well analyses methods are problematic at the Landfill as well as serve to limit the need for validation of intra-well water quality data in M&RP CI-7336.
- 61. From 1991 to 2001, approximately 94 acres of side slope cover were constructed by the Discharger in the Main Canyon, Canyon 9 and Eastern Canyon areas comparable to the closed side slope cover described in Finding No. 17, above (see Figure 4, attached). In 2002, the Discharger completed a characterization investigation and unsaturated flow modeling analysis to demonstrate that the additional 94 acres of intermediate side slope cover offer equivalent performance characteristics to a prescriptive final cover system defined in Subtitle D. Currently the Discharger is conducting a long-term field investigation to monitor moisture movement in the intermediate cover under various soil conditions, water application rates, and vegetative conditions to confirm moisture modeling results for potential approval as an alternative final cover.
- 62. Landfill gas migration monitoring probes are located along the boundary of the Landfill (see Figure 11, attached). These probes are currently monitored on a monthly basis pursuant to requirements of the CIWMB and the local enforcement agency (LEA), the Los Angeles County Department of Health Services, Solid Waste Program.
- 63. The Discharger will expand the Landfill gas recovery system to include the proposed waste management facility expansion. Gas is collected through extraction wells and gravel-lined trenches, designed in accordance with 27 CCR requirements. The gas is combusted to reduce odor at the Puente Hills Energy Recovery from Gas Facility (PERG) facility located on-site and operated by the Discharger. Electricity is generated from this combusted gas. Landfill gas is also converted into compressed natural gas for fueling purposes (Clean Fuels Program). The Clean Fuels Program aims to improve air quality through the processing of gas not used at the Landfill power plant into compressed natural gas fuel to achieve a substantial emissions reduction. The clean compressed natural gas fuel reduces air emissions by lowering the emissions from vehicles that burn compressed natural gas instead of conventional fuel and by minimizing the flaring of excess landfill gas. This fuel is used as a gasoline or diesel fuel substitute to reduce emissions in Districts' vehicles (vans, pickups, and cars), and off road heavy-duty equipment. Process wastewater from PERG is discharged to the sanitary sewer system under Industrial Waste Permit No. 11265 issued by















the Discharger.

- 64. Incinerator ash from the CREF and SERRF facilities is currently disposed of at the Landfill. The incinerator ash is stabilized with cement prior to disposal at the Landfill. The volume of ash received in the past has averaged approximately 12,000 tons per month, which is approximately five percent of the daily volume by weight of the refuse received at the Landfill. Section 20220(d) of 27 CCR indicates that incinerator ash may be discharged at a Class III landfill unless the DTSC determines that the waste must be managed as hazardous waste. The ash from CREF and SERRF has not been classified as hazardous by the DTSC. However, some heavy metal concentrations for the CREF and/or SERRF ash wastes have exceeded title 22 of the CCR solubility threshold limits. Because of this, the long-term disposal of ash may not be in conformance with applicable water quality objectives. Thus, this Order specifies that the Regional Board be notified at least 120 days in advance of the anticipated disposal of ash from any facility other than CREF and SERRF. A program of acceptance, dependent upon its classification as non-hazardous by the DTSC and upon its conformance with applicable water quality objectives is required by the Regional Board at that time. Treated incinerator ash is sampled and analyzed in accordance with requirements of M&RP Nos. CI-2294 and 7336.
- 65. Dewatered sewage sludge and water treatment sludge are currently accepted for disposal at the Landfill. Sludges are sampled and analyzed in accordance with requirements of M&RP Nos. CI-2294 and 7336.
- 66. An unsaturated zone monitoring program is required for the Landfill, pursuant to 27 CCR section 21769. The intent of an unsaturated zone monitoring program is to monitor unsaturated soils/bedrock between the waste management unit and groundwater to provide an early indication of potential groundwater quality degradation. The Discharger installed an unsaturated zone monitoring system in the Main Canyon and Canyon 9 areas of the Landfill in 1988 consisting of ten suction lysimeters. Between 1988 and 1994, the unsaturated zone monitoring system proved ineffective in supplementing water quality monitoring because collection of water samples was problematic as the lysimeters consistently failed to yield an adequate volume of water to allow analysis. In 1988, the Discharger proposed to the Regional Board that the Eastern Canyons area be exempt from unsaturated zone monitoring based on the results of the monitoring program in the Main Canyon and Canyon 9 areas and because shallow groundwater would limit early detection of any contaminant release. In 1994, the Discharger proposed to the Regional Board, and subsequently discontinued the unsaturated zone monitoring program in the Main Canyon and Canyon 9 areas. On October 7, 1998, Regional Board staff approved the proposed exemption.
- 67. The Discharger uses recycled water for irrigation and dust control purposes at the Landfill. These uses are in conformance with the goals of the Basin Plan and State statutes and regulations pertaining to the use of recycled water in California that can be found in the

CWC, CCR, and the HSC. State policy promotes the use of recycled water to the maximum extent in order to supplement existing surface and groundwater supplies to help meet water needs (CWC section 13510 to 13512).

REGULATORY REQUIREMENTS

- 68. The USEPA under title 40 of the code of federal regulations (40 CFR) section 257 and section 258 (Subtitle D) revised existing regulations for municipal solid waste disposal facilities in response to the 1984 Hazardous and Solid Waste Amendments of RCRA and added new detailed requirements addressing the issues of location restriction, facility operation and design criteria, groundwater monitoring and corrective action, closure and postclosure maintenance, and financial assurance. USEPA delegated the responsibility for implementing these regulations to states with a fully approved landfill regulatory program. As responsible agencies for an approved state, the State Board and the Regional Board adopted the federal Subtitle D regulatory requirements (State Board Resolution No. 93-62 and Regional Board Order No. 93-062, respectively). Regional Board Order No. 93-062 was adopted September 27, 1993.
- 69. Pursuant to section 402(p) of the federal Clean Water Act (CWA) and 40 CFR section 122, section 123, and section 124 the State Board adopted Order No. 97-03-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, "Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities". The Landfill was enrolled under general NPDES permit WDID No. 4B196000294 on March 27, 1992, to regulate surface water discharges and is also subject to industrial stormwater permit No. 419S006191 and construction stormwater permit No. 419S317018. The Discharger has implemented a stormwater pollution prevention plan (SWPPP) at the Landfill as required by the general NPDES permit.

CORRECTIVE ACTION PROGRAM

- 70. VOCs consisting of tetrachloroethylene (PCE), trichloroethylene (TCE), vinyl chloride, cis-1,2-dichloroethylene (cis 1,2-DCE), 1,2-dichloroethane (1,2-DCA), 1,4-dichlorobenzene (1,4-DCB), and 1,1-dichloroethane (1,1-DCA), have been detected in some of subsurface Barrier Nos. 1 and 3 downgradient groundwater monitoring wells in the unlined Main Canyon area of the Landfill. The VOCs have been detected in concentrations below drinking water standards (maximum contaminant levels promulgated by DHS) to eight times greater than drinking water standards. The Discharger has instituted a CAP in accordance with requirements of Order No. 90-046, Provision C.6.
- 71. In March 1995, following confirmation of a release, the Discharger completed a scan of the constituents listed in appendix II of 40 CFR section 258 (Appendix II) in accordance with 40 CFR section 258.55 requirements. The testing results for the Appendix II constituents

scan indicated that there were no constituents of concern (COCs) that had not previously been identified in the VOCs release in the Barrier Nos. 1 and 3 areas of the Landfill.

- 72. The Discharger submitted a final evaluation monitoring program (EMP) report on September 30, 1998, based on numerous subsurface investigations completed by the Discharger between 1994 through 1998 that delineated the full lateral and vertical extent of the VOC releases near subsurface Barrier Nos. 1 and 3. The Discharger installed monitoring wells M04A, M04B, M11A, M05A, RMW6 and M10B (Barrier No. 1) and M31A, R32B, M33A and R34B (Barrier 3) as groundwater monitoring points at the Landfill boundary directly in the path of contaminant migration, pursuant to 40 CFR section 258.55(g)(1)(ii) and installed assessment wells EMP1, EMP2, EMP3, EMP4, EMP5 and EMP6 offsite to delineate the three-dimensional nature and extent of the release, pursuant to 40 CFR section 258.55(g)(1)(i) and 27 CCR section 20425(b). The EMP was conducted in accordance with 27 CCR section 20425 and 40 CFR section 258.55 for AMP. The EMP report was approved by Regional Board staff on October 7, 1998.
- 73. The Discharger prepared a final engineering feasibility study (EFS), based upon the findings in the final EMP, exploring eighteen corrective action technologies to mitigate the VOCs at subsurface Barrier Nos. 1 and 3. The EFS was conducted in accordance with 27 CCR section 20425 and 40 CFR section 258.56 and section 258.57 for an Assessment of Corrective Measures (ACM) and Selection of Remedy (SOR).
- 74. Based upon the results of the EFS, the Discharger submitted a ROWD on January 11, 1999, which proposed a CAP that continues source control through operation of existing subsurface Barrier Nos. 1 and 3 groundwater extraction systems, enhanced landfill gas control, and allows for natural attenuation to dissipate VOCs in off-site areas. Groundwater monitoring continues to be used to measure the effectiveness of the CAP.
- 75. Pursuant to 27 CCR, section 21730(c), the Discharger discussed the findings of the final EMP report, the EFS, and the proposed CAP at a public workshop held on December 17, 1998. As discussed in Finding No. 38, the CAP WDRs were adopted on June 30, 1999.
- 76. To control the downgradient migration of contaminants in groundwater, the Discharger has conducted groundwater containment pumping at subsurface Barriers No. 1 and 3 since before 1999. Contaminated groundwater from the Barrier No. 1 and 3 areas is discharged to the sanitary sewer system pursuant to industrial waste discharge requirements (Industrial Waste Permit Nos. 10524 or 11265 issued by the Discharger).
- 77. Since landfill gas is likely the principal source of the release from the Main Canyon area of the Landfill, the Discharger has installed/improved landfill gas collection and extraction systems as interim corrective action measures (interim CAMs). Operation of enhanced landfill gas collection and extraction systems in the Main Canyon area commenced in approximately January 2000.

















- 78. The Discharger continues to notify all persons who own the land or reside on the land that directly overlies any part of the contaminant plume about the status of contaminants that have migrated off-site pursuant to 40 CFR section 258.55(g)(1)(iii) requirements.
- 79. This Order places the Landfill into a CAP while implementing corrective measures for the known releases meeting applicable state and federal requirements. This approach eliminates needless complexity associated with applying concurrent programs (i.e., running unaffected portions of the Landfill under a DMP and the portions affected by the release under either an EMP or a CAP, or both). The Regional Board chooses to implement this approach by documenting and responding to the compliance status of each monitoring parameter (Mpar) individually at each compliance well separately (i.e., the Discharger will track the compliance status of each such "well/MPar pair" separately).
- 80. Under this Order, at any given time, each well/MPar pair will be in one of two compliance status conditions. Prior to the MPar's exhibiting a measurably significant landfill related exceedance at a given well, that well/MPar pair will be in "detection mode" and monitoring will involve statistical or non-statistical data analysis designed to detect a Landfill-related increase at that well for that MPar. Once a well/MPar pair exhibits a measurably significant increase, it will change to "tracking mode" and monitoring will involve concentration-versus-time plotting until directed otherwise by the Executive Officer to document changes in the release. Once in tracking mode, a well/MPar pair can return to detection mode only upon inception of a proof period to demonstrate either the increase is not landfill related, or the successful completion of corrective action.
- 81. This Order minimizes the occurrence of false-positive indications in two ways:
 - a) it includes a non-statistical data analysis method, meeting 27 CCR section 20415(e)(8-9) requirements, that collectively analyzes all the Mpars, at a given well, whose background data exceeds its respective method detection limit (MDL) no more than 10% of the time; and
 - b) all statistical and non-statistical data analysis methods used on well/MPars in detection mode data analyses under this Order include a discrete retest as described under 27 CCR section 20415(e)(8)(E).
- 82. To assure compliance with the requirements and considerations under 40 CFR section 258.55 through section 258.57 and 27 CCR section 20425 in the simplest way possible, this Order:
 - a. requires statistical or non-statistical data analysis, at any given compliance well, only for those MPars that are in detection mode at that well;

















- b. requires concentration-versus-time plotting, at any given compliance well, for all MPars that are in tracking mode at that well;
- c. uses a periodic (five-year) presence/absence screening of all COCs, rather than statistical/non-statistical data analysis, at all appropriate wells to keep the MPar list updated to include all COCs that are detectable in groundwater;
- d. uses annual leachate sampling (available only from lined areas), for all Appendix II constituents, to keep the COC list updated to include all Appendix II constituents that could be released from lined areas of the Landfill, and
- e. implements an automatic update procedure to assure that the MPar and COC lists remain current.
- 83. Given that detection mode testing can be compromised by the arrival of a COC at any background well either as a result of the release (e.g., through advective flow, in the unsaturated zone, of gas phase VOCs in landfill gas) or through the arrival of such a constituent from an upgradient source, this Order implements a simple means for identifying such anomalies which requires the Discharger to investigate their cause, and initiates appropriate adjustments to the monitoring program.
- 84. Since 1994, the Discharger has been monitoring leachate annually from the LCRSs for the Canyon 9 and/or the Eastern Canyons areas for Appendix II constituents, and re-testing for newly discovered ones, in order to create a COC list containing those Appendix II constituents that could be released from these areas of the Landfill. These WDRs narrow the scope of the COC list for the areas downgradient of Canyon 9 and the Eastern Canyons to include, from Appendix II, only those constituents that have been detected and verified in leachate as indicated in Table 1 of M&RP Nos. CI-2294. By monitoring for detectable COCs, any foreseeable breakdown products, and any constituents required by the Executive Officer, the Discharger will be monitoring for all Appendix II constituents that could be released from the Canyon 9 and Eastern Canyon areas of the Landfill. This is the manner in which this Order meets the requirements of 40 CFR section 258.55(b). Because the Main Canyon area is unlined, leachate monitoring is not possible. Thus, for groundwater monitoring wells downgradient of the Main Canyon area, the COC list includes all Appendix II constituents.
- 85. Given that the VOCs in the federal monitoring parameter list, Appendix I to 40 CFR section 258 (Appendix I), are all Appendix II constituents, leachate sampling from the LCRSs for the Canyon 9 and Eastern Canyons areas also serves as a basis for narrowing the scope of VOCs which the Discharger must monitor in these areas to include only those Appendix I constituents that have ever been detected in leachate, at trace level or above, and verified by retest. This is the manner in which this order implements 40 CFR section 258.54(a)(1).

ADMINISTRATIVE

- 86. In September 2004, the State Board adopted regulations requiring that dischargers begin electronic submittal of information (ESI) for all groundwater cleanup programs regulated by the Regional Water Quality Control Boards. Effective January 1, 2005, electronic submittal of all technical reports and monitoring reports was extended to include all reports filed by Land Disposal Program dischargers. The requirements in this Order, as they are met, are in conformance ESI regulations.
- 87. California Water Code (CWC) section 13263 provides that all WDRs shall be reviewed periodically and, upon such review, may be revised by the Regional Board to comply with changing state or federal laws, regulations, policies, or guidelines. The Discharger's WDRs for the Landfill are being revised to include updated findings for waste disposal per the expansion described in Finding No. 38, above, as well as to update water quality monitoring programs including a CAP and assessment monitoring program (AMP).
- 88. Revision of the Discharger's WDRs for the Landfill constitutes an existing project as defined in section 15301, chapter 3, title 14 of the CCR and is therefore exempt from the provisions of the CEQA (Public Resources Code section 21000 et seq.).

The Regional Board has notified interested agencies and all known interested parties of its intent to issue requirements for waste disposal, AMP, and CAP for the Landfill.

The Regional Board in a public meeting heard and considered all comments pertaining to waste disposal, CAP, and AMP for the Landfill.

Pursuant to section 13320 of CWC, any aggrieved party may seek review of this Order by filing a petition with the State Board. The petition must be received by the State Water Resources Control Board, P.O. Box 100, Sacramento, CA 95812, within 30 days of the date this Order is adopted.

IT IS HEREBY ORDERED that the Discharger shall comply with the following requirements pertaining to the Landfill:

A. PROHIBITIONS

- 1. Discharges of waste to land as a result of inadequate waste disposal practices, and that have not been specifically described to the Regional Board and for which valid WDRs are not in force, are prohibited.
- 2. The discharge of waste shall not:
 - a. Cause the occurrence of coliform or pathogenic organisms in waters

















pumped from a groundwater basin;

- b. Cause the occurrence of objectionable tastes or odors in waters pumped from a groundwater basin;
- c. Cause waters pumped from a groundwater basin to foam;
- d. Cause the presence of toxic materials in waters pumped from a groundwater basin;
- e. Cause the pH of waters pumped from a groundwater basin to fall below 6.0, or rise above 9.0;
- f. Cause the Regional Board's water quality objectives for the groundwaters or surface waters as established in the Basin Plan to be exceeded; and
- g. Cause pollution, contamination, or nuisance, as defined in CWC section 13050, or adversely affect beneficial uses of groundwaters or surface waters as established in the Basin Plan.
- 3. Odors, vectors, and other nuisances of waste origin beyond the limits of the Landfill are prohibited.
- 4. The discharge of waste to surface drainage courses or to usable groundwater is prohibited.
- 5. Basin Plan prohibitions shall not be violated.
- 6. All applicable federal, state, and county sanitary health codes, rules, regulations, and ordinances pertinent to the disposal of wastes on land shall be complied with in the operation and maintenance of the Landfill.

B. REQUIREMENTS FOR ACCEPTABLE MATERIALS

- 1. The Discharger shall only accept waste for disposal at the Landfill as deemed acceptable for a Class III facility by the Regional Board through orders or regulations.
- 2. Wastes disposed of at the Landfill shall be limited to certain non-hazardous solid wastes (as described in section 20220(a) of 27 CCR), inert solid wastes (as described in section 20230 of 27 CCR), dewatered sewage or water treatment sludge, treated municipal solid waste incinerator ash, and treated wood waste (TWW).





















- 3. Non-hazardous solid waste means all putrescible and non-putrescible solid, semi-solid and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded waste (whether of solid or semi-solid consistency); provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation to waters of the state (i.e., designated waste).
- 4. Dewatered sewage or water treatment sludge may be discharged under the following conditions:
 - a. In areas containing approved liner and LCRS systems, sludge may be discharged provided it contains at least twenty percent solids if primary sludge, or at least fifteen percent solids if secondary sludge, mixtures of primary or secondary sludges, or water treatment sludge.
 - b. In areas where no approved liner and LCRS exist, sludge may be discharged if it contains at least 50 percent solids whether primary or secondary sludge, mixtures of primary or secondary sludges, or water treatment sludge.
 - c. A minimum solids-to-liquids ratio of 5:1 by weight shall be maintained to ensure that the co-disposal will not exceed the initial moisture-holding capacity of the non-hazardous solid waste.
- 5. Incinerator ash may be disposed of at the Landfill under the following conditions:
 - a. Only treated incinerator ash from the CREF and the SERRF facilities may be disposed of at the Landfill. Incinerator ash shall not be accepted from any other source without Regional Board action to amend the Landfill's WDRs. Such an amendment will require the Discharger to file a ROWD and an appropriate filing fee at least 120 days prior to the proposed start of disposal.
 - b. Treated incinerator ash may be beneficially reused at the Landfill as base for a wet-weather deck. Other uses for the treated ash at the Landfill shall be approved by the Executive Officer prior to implementation by the Discharger.
 - c. Annually, the Discharger shall complete a USEPA SW-846 chapter 9 analysis, using MINITAB, or comparable software as approved by the Executive Officer, to determine if treated incinerator ash from the CREF





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and the SERRF facilities may be hazardous using all available lead and cadmium test results. Results of the analysis shall be reported to the Regional Board annually. For any analysis results indicating that the incinerator ash could be hazardous, the Discharger shall also report the results to the DTSC. An initial step for completing the analysis shall be to determine if there are enough data points to make a valid determination. If It there are not sufficient data points to complete the analysis, the Discharger shall propose, for Executive Officer approval, an accelerated sampling/analysis program (to obtain more sample analyses), together with a requirement to redo the analysis in six months.

- 6. TWW may be disposed of at the Landfill under the following conditions:
 - a. Discharge of TWW shall only be to composite-lined portions of the Landfill.
 - b. The TWW is managed so as to prevent scavenging.
 - c. Any management of the TWW at the Landfill prior to disposal, or in lieu of disposal, complies with applicable HSC requirements.
 - d. TWW disposal shall be discontinued if monitoring of the composite-lined portion of the Landfill where TWW disposal has occurred indicates a verified release until corrective action results in cessation of the release.

C. REQUIREMENTS FOR UNACCEPTABLE MATERIALS

- 1. No hazardous wastes (as defined in 22 CCR section 66261.3 et seq.), designated wastes (as defined in CWC section 13173), or special wastes (as defined in 22 CCR), such as liquids, oils, waxes, tars, soaps, solvents, or readily water-soluble solids, such as salts, borax, lye, caustic or acids shall be disposed of at the Landfill.
- 2. No semi-solid wastes shall be disposed of at the Landfill, except sludges under conditions set forth in Provision No. B.4 above, or unless they are first processed in a solidification operation approved by the Executive Officer. Semi-solid waste means waste containing less than 50 percent solids, as described in section 20200 of 27 CCR. In cases of spoiled semi-solid food or consumer semi-solid wastes, Regional Board staff are authorized to approve solidification or waste disposal operations at the Landfill on a case-by-case basis.
- 3. No materials that are of a toxic nature, such as insecticides or poisons, shall be disposed of at the Landfill.

















- 4. No radioactive waste, including low level radioactive waste, as defined by the agency with jurisdictional authority, shall be disposed at the Landfill.
- 5. No infectious materials or hospital or laboratory wastes, except those authorized for disposal to land by official agencies charged with control of plant, animal and human disease shall be disposed of at the Landfill.
- 6. No pesticide containers shall be disposed of at the Landfill, unless they are rendered non-hazardous by triple rinsing. Otherwise, they must be hauled off-site to a legal point of disposal.
- 7. No septic tank or chemical toilet wastes shall be disposed of at the Landfill.

D. REQUIREMENTS FOR DISPOSAL SITE OPERATIONS

- 1. Drainage controls, structures, and facilities shall be designed to divert any precipitation or tributary runoff and prevent ponding and percolation of water at the Landfill in compliance with section 20365 and section 21090(b)(1) of 27 CCR. When necessary, temporary structures shall be installed as needed to comply with this requirement.
- 2. The Landfill shall be graded and maintained to promote runoff of precipitation and to prevent ponding of liquids and surface water. Erosion or washout of refuse or cover materials by surface flow shall be controlled to prevent off-site migration.
- 3. Wastes deposited at the Landfill shall be confined thereto, and shall not be permitted to blow, fall, or otherwise migrate off-site, or to enter off-site water drainage facilities or watercourses.
- 4. The periodic load-checking program shall continue to be implemented to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable wastes.
- 5. The Discharger shall comply with notification procedures contained in section 13271 of the CWC with regard to the discharge of hazardous wastes. The Discharger shall remove and relocate to a legal point of disposal, any wastes that are discharged at the Landfill in violation of these requirements. The Regional Board shall be informed via semi-annual monitoring reports when relocation of wastes is necessary. The source and final disposition (and location) of the wastes, as well as methods undertaken to prevent future recurrence of such disposal shall also be reported.

















- 6. Waste material shall not be discharged on any ground surface that is less than five feet above the highest anticipated groundwater level, including capillary rise.
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- 7. All wastes shall be covered at least once during each 24-hour period in accordance with section 20680 and section 20705 of 27 CCR. Intermediate cover over wastes discharged to the Landfill shall be designed and constructed to minimize percolation of precipitation through wastes and contact with materials deposited.
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- 8. Alternative daily cover at the Landfill may be used consistent with section 20690 of 27 CCR.
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- 9. The migration of gases from the Landfill shall be controlled as necessary to prevent water pollution, nuisance, or health hazards. The discharge of wastes or waste by-products (i.e., leachate or gas condensate) to off-site surface drainage courses or to groundwater is prohibited.
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- 10. No surface water, wastewater or stormwater shall leave the Landfill except as permitted by a NPDES permit issued in accordance with the federal CWA and the CCR. The Discharger shall maintain and modify, as necessary, the SWPPP developed for the Landfill.
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- 11. Gas condensate gathered from the gas monitoring and collection system at the Landfill shall not be returned to the Landfill unless approved by the Executive Officer. Any proposed modifications or expansions to this system shall be designed to allow the collection, testing and treatment, or disposal by approved methods, of all gas condensate produced at the Landfill.
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- 12. The Discharger shall intercept and remove any liquid detected in all LCRSs at the Landfill to a legal point of disposal and leachate shall not be returned back to the Landfill unless it meets the requirements of this Order for onsite reuse as described in Section G, below and satisfies leachate handling requirements contained in 27 CCR section 20340(g). Any leachate determined to be hazardous shall be transported by a licensed hazardous waste hauler to an approved treatment or disposal facility.



- 13. In any area within the Landfill where a natural spring or seep is observed, provisions shall be made and/or facilities shall be provided to ensure that this water will not come in contact with decomposable refuse. The locations of all springs and seeps found prior to, during, or after placement of waste material that could affect the Landfill shall be reported to the Regional Board.
- 14. The Discharger shall develop/maintain permanent survey monuments at the Landfill

throughout the development, closure and postclosure maintenance periods. Benchmarks shall be established and maintained in sufficient numbers to enable reference to key elevations and to permit control of critical grading and compaction operations.

- 15. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) installed or used to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, and adequate laboratory and process controls including appropriate quality assurance procedures.
- 16. The Discharger shall report any noncompliance or any incident resulting from Landfill operations that are in violation of this Order. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within fourteen days of the time that the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- 17. Upon the discovery of any abandoned oil wells at the Landfill the Discharger shall properly decommission such well(s) according to the appropriate Oil, Gas, & Geothermal {PRIVATE "TYPE=PICT;ALT="}Resources requirements.

E. REQUIREMENTS FOR CONTAINMENT SYSTEMS

- 1. The Discharger shall install containment structures that are capable of preventing degradation of the waters of the state. Construction standards for containment structures shall comply with 27 CCR requirements. Design specifications are subject to review and approval by the Executive Officer prior to any construction.
- 2. All containment structures and erosion and drainage control systems at the Landfill shall be designed and constructed under direct supervision of a California-registered civil engineer or certified engineering geologist, and shall be certified by the individual as meeting the prescriptive standards and/or performance goals of 27 CCR.
- 3. The Discharger shall submit detailed preliminary plans, specifications, and descriptions for all proposed containment structures and construction features for

















Executive Officer approval at least 60 days prior to construction. The preliminary plans shall contain detailed quality assurance/quality control for the proposed construction. No disposal shall occur in a new area until the corresponding construction is completed and certified. The Discharger shall also submit a description of, and location data for, ancillary facilities, including roads, waste handling areas, buildings, and equipment cleaning facilities. As-built plans shall be submitted within 60 days after the completion of construction. If the as-builts are virtually identical to the approved preliminary plans and specifications, only change sheets need be submitted in lieu of complete as-built plans. Along with the change sheets or as-builts, the Discharger shall submit a program that will provide for the annual testing of the LCRS to demonstrate its operating efficiency.

4. Cut and subgrade slopes, fill slopes, refuse cells and visual berms shall be designed and excavated or constructed in a manner that will resist settlement and remain stable during the design earthquake event specific to the Landfill in accordance with section 20370 of 27 CCR.

F. REQUIREMENTS FOR GROUNDWATER MONITORING

- 1. Monitoring and reporting requirements for the Landfill shall hence be consolidated under M&RP No. CI-2294. The Discharger shall implement the attached M&RP No. CI-2294 which are incorporated herein by reference and revisions thereto in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Landfill or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the Landfill. M&RP No. CI-2294 is designed to satisfy both federal and state regulatory monitoring requirements.
- 2. At any time, the Discharger may file a written request, including appropriate supporting documents, with the Executive Officer, proposing modifications to M&RP No. CI-2294. The Discharger shall implement any changes to the revised M&RP approved by the Executive Officer upon receipt of a signed copy of the revised M&RP.
- 3. The Discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with CWC section 13267. Failure or refusal to furnish these reports or falsifying any information provided therein renders the Discharger guilty of a misdemeanor and subject to the penalties stated in CWC section 13268. Monitoring reports shall be submitted in accordance with the provisions contained in the attached M&RP No. CI-2294, as directed by the Executive Officer.
- 4. The effectiveness of all monitoring wells, monitoring devices, and leachate and

















gas collection systems shall be maintained throughout the Landfills operational, closure, and postclosure maintenance periods in accordance with acceptable industry standards. The Discharger shall maintain a groundwater monitoring well preventative maintenance program (MWPMP) approved by the Executive Officer. Elements of the program should include a minimum of periodic visual inspections of well integrity, pump removal and inspection, and appropriate inspection frequencies. If a well or piezometer is found to be inoperative, the Regional Board and other interested agencies shall be so informed in writing within seven days after such discovery, and this notification shall contain a time schedule for returning the well or piezometer to operating order. Changes to the existing program shall be submitted for Executive Officer approval at least 30 days prior to implementing the change(s).

- 5. If a well or piezometer is proposed to replace an inoperative well or piezometer identified in the MWPMP, the Discharger shall not delay replacement while waiting for Executive Officer approval. However, a technical report describing the location and construction details shall be submitted to the Executive Officer within 30 days.
- 6. The Discharger shall provide for proper handling and disposal of water purged from monitoring wells at the Landfill during sampling. Water purged from a monitoring well shall not be returned to that well (or any other Landfill well).
- 7. Any abandoned wells or bore holes under the control of the Discharger, and situated within the Landfill boundaries, must be located and properly modified or sealed to prevent mixing of any waters between adjacent water-bearing zones. A notice of intent to decommission a well must be filed with the appropriate regulatory agencies prior to decommissioning. Procedures used to decommission these wells, or to modify wells still in use, must conform to the specifications of the local health department or other appropriate agencies.
- 8. For any monitoring wells installed at the Landfill in the future, the Discharger shall submit technical reports for approval by the Executive Officer prior to installation. These technical reports shall be submitted at least 60 days prior to the anticipated date of installation of the wells. These reports shall be accompanied by:
 - a. Maps and cross sections showing the locations of the monitoring points; and
 - b. Drawings and data showing construction details of the monitoring points.

 These data shall include:
 - i. casing and test hole diameter;

















- ii. casing materials;
- iii. depth of each hole;
- iv. the means by which the size and position of perforations shall be determined, or verified, if in the field;
- v. method of joining sections of casing;
- vi. nature of filter materials;
- vii. depth and composition of soils; and
- viii. method and length of time of well development.
- 9. The compliance point(s) where water quality protection standards (WQPSs) apply shall be located along downgradient edges of waste management facilities at the Landfill or an alternate location approved by the Executive Officer.
- 10. The compliance monitoring wells at the Landfill shall consist of those wells listed in Item No. 6 of-M&RP No. CI-2294. All compliance monitoring wells shall be monitored pursuant to this Order and as directed by the Executive Officer through future revisions of M&RP No. CI-2294.
- 11. The MPars and COCs for compliance monitoring at the Landfill shall be those described in Item Nos. 8 and 9 of M&RP No. CI-2294.
- 12. The compliance period for which WQPSs are applicable shall be the entire active life of a waste management facility, and during the closure and postclosure maintenance periods.
- 13. If necessary, the Discharger shall install additional groundwater, soil pore liquid, soil pore gas, or leachate monitoring devices necessary to comply with M&RP No. CI-2294, as adopted or as revised by the Executive Officer.
- 14. The WQPS for the on-going CAP at Subsurface Barrier Nos. 1 and 3 of the Main Canyon landfill-gas related VOCs will be the Minimum Levels (ML) as defined in Attachment 1 using USEPA method 8260, or an equivalent method approved by the Executive Officer.
- 15. The Discharger shall submit semi-annual reports to the Regional Board that describe the effectiveness of the CAP, according to the schedule outlined in revised M&RP No. CI- 2294.
- 16. If the Discharger determines that the CAP does not satisfy the provisions of 27 CCR, section 20430(i), the Discharger shall, within 90 days of making the determination, submit an amended ROWD to make appropriate changes to the CAP.

















G. REQUIREMENTS FOR ON-SITE USE OF WATER

- 1. No water shall be routinely applied to refuse fill areas except for landscape irrigation, surface dust control, winter deck construction, road construction, final cover construction or non-emergency uses approved by the Executive Officer. Any water used at the Landfill, except for potable water, recycled water, and any other water allowed by the Executive Officer, shall be subject to these WDRs. Water used for these purposes shall be applied only on completed lifts, in quantities not to exceed that necessary to reduce immediate dust hazards, or support plant life, or to achieve desired compaction. Overflow or runoff caused by the over-application or improper management of irrigation or dust control water are prohibited.
- 2. No wastewater shall leave the Landfill except as permitted by an NPDES permit issued in accordance with the federal Clean Water Act (CWA) and CWC. The Discharger shall maintain and modify, as necessary, the NPDES Storm Water Pollution Prevention Plan developed for the Landfill.
- 3. Wastewater produced at the Landfill shall not be subject to these WDRs, pursuant to provision G.12 above, if it meets applicable requirements of the CWC, CCR, and HSC for recycled water. In order for wastewater to not be subject to WDRs it Landfill shall comply with regulatory criteria promulgated by the DHS, currently set forth in title 22, division 4, section 60301 et seq., CCR, which includes specified approved uses of recycled water, numerical limitations and requirements, treatment method requirements and performance standards to be considered equivalent to recycled water. Because the DHS is statutorily required (CWC section 13521) to establish uniform statewide reclamation criteria for the various uses of recycled water to assure protection of public health where recycled water use is involved, pursuant to CWC section 13523, the Regional Board has consulted with and considered recommendations of the DHS in issuing waste discharge/water recycling The Discharger shall demonstrate make an equivalence requirements. demonstration to the Executive Officer compliance with this provision before for each Landfill wastewater source is used as an equivalent recycled water as defined above, proposed to be recycled at the Landfill. Wastewater sources for which an equivalence demonstration has not been completed shall conform to Provision G.8 of this Order.
- 4. Requirements for the use of recycled water at the Puente Hills Landfill are also controlled by Water Reclamation Requirements for the San Jose Creek Water Reclamation Plant (Regional Board Order No. 97-072), which is the source of recycled water used at the Landfill. Order No. 97-072 contains recycled water requirements and provisions in accordance with California Code of Regulations Title 22 Water Recycling Criteria. The use of Title 22 tertiary treated recycled water at the Puente Hills Landfill includes, but is not limited

to landscape irrigation, dust control and cooling water purposes at the Puente Hills Energy Recovery from Landfill Gas Facility.

- 5. Mixing any Landfill wastewater source with recycled or potable water to achieve equivalence to recycled water standards, as described in Provision G.3 above, for the purpose of reusing the wastewater at the Landfill is prohibited.
- H
- 6. During periods of precipitation, when the use of irrigation or dust control is not necessary for the purpose specified in this Order, all wastewater generated at the Landfill shall be stored, discharged to the sanitary sewer, or hauled to a legal point of disposal.



7. Washing of paved Landfill roads during rainy periods shall only occur when muddy roads create a safety concern. Washing of equipment or vehicles on the Landfill shall be confined to controlled areas where the wastewater is collected for proper disposal.



8. Wastewater used at the Landfill shall not percolate into the disposal areas or native soil, or enter stormwater collection systems, except as specifically permitted by this Order.



9. All uses of **potable water, recycled, or wastewater** shall be within the boundaries of the Landfill property. During an emergency, this water may be used for fire fighting on the Landfill or on undeveloped areas off and adjacent to the Landfill.

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10. Landfill wastewater, or mixed wastewater, shall not be discharged from the Landfill property boundaries if it exceeds screening levels used for general NPDES permits in the Los Angeles Region that apply to water with Municipal and Domestic Supply (MUN) and/or groundwater recharge (GWR) beneficial uses designations (see Attachment 2), or if the wastewater is outside the range of 6.0 to 9.0 pH units, or it exceeds the following limits:

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Constituent	Unit	Maximum Limit
COD	mg/L*	240
Oil and Grease	mg/L	15
Nitrate	mg/L	4 5
Coliform	Most probable number (MPN)/100 milliliters	23

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A Landfill wastewater source that exceeds screening levels used for general

^{*}milligrams per liter

NPDES permits can be discharged if the Discharger can make a demonstration to the Executive Officer that no beneficial surface water or groundwater uses are impacted from any elevated constituent(s).

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H. REQUIREMENTS FOR REPORTING SCHEDULED ACTIVITIES

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- 1. The Discharger shall notify Regional Board staff at least 30 days prior to any maintenance activities, for approval by the Executive Officer, which could alter existing surface drainage patterns or change existing slope configurations. These activities may include, but not be limited to, significant grading activities, the importation of fill material, the design and installation of soil borings, groundwater monitoring wells and other devices for Landfill investigation purposes.
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- 2. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
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- 3. If the Discharger becomes aware that it failed to submit any relevant facts in any report to the Regional Board, it shall submit such facts or information within seven days of its discovery of the omission.
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- 4. The Regional Board shall be notified of any incident resulting from Landfill operations that may endanger the environment, by telephone within 24 hours, and in writing within fourteen days. The written notification shall fully describe the incident including what occurred, when it occurred, the duration of the incident, when correction occurred (or when correction will occur if it is a continuing incident), and the steps taken or planned to reduce, eliminate, and/or prevent recurrence. All instances of noncompliance with this Order shall also be reported to the Regional Board in the same manner as stated above.
- \mathbf{V}
- 5. The Discharger shall notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage between the Discharger and a new owner of the Landfill. Any transfer agreement between the Discharger and a new owner or operator shall include an acknowledgement that the Discharger is liable for violations up to the transfer date and that the new owner is liable from the transfer date on. The agreement shall include an acknowledgement that the new owners accept responsibility for compliance with this Order.
- 6. The Discharger shall notify the Regional Board in writing within seven days, if fluid

is detected in a previously dry LCRS.

- 7. The Discharger shall submit or update an existing "Operations Plan" for the Landfill within 90 days after adoption of this Order, to be approved by the Executive Officer, describing Landfill operations which shall include:
 - a. A description of proposed treatment, storage, and disposal methods.
 - b. Contingency plans for the failure or breakdown of waste handling facilities which could potentially have water quality effects, including notice of any such failure, or any detection of waste or leachate in monitoring facilities, to the Regional Board, appropriate local governments, and water users downgradient of the Landfill.
 - c. A description of inspection and maintenance programs which will be undertaken regularly during disposal operations, the closure, and the postclosure maintenance period of facilities or equipment, which could have potential water quality effects.
- 8. The Discharger shall notify the Regional Board of changes in information submitted in the JTD and supplementary information, including any material change in the types, quantities, or concentrations of wastes discharged; or Landfill operations and features. The Discharger shall notify the Regional Board at least 120 days before any material change is made at the Landfill.
- 9. The Discharger shall comply with the closure and postclosure maintenance requirements and notification requirements contained in 27 CCR section 21769. Closure must be in accordance with a closure plan and postclosure maintenance plan approved by the Executive Officer and the CIWMB.
- 10. Reports of the quality and quantity of incinerator ash disposed of at the Landfill shall be filed for each monitoring period.
- 11. Reports of the quality and quantity of sludge disposed of at the Landfill shall be filed for each monitoring period.
- 12. The Discharger shall report (on a semi-annual basis) the total volume of all irrigation water used at the Landfill each month and the area(s) where it is applied.
- 13. All applications, reports, or information submitted to the Executive Officer shall be signed and certified as follows:
 - a. The applications, reports, or information shall be signed as follows:

















- i. For a corporation by a principal executive officer of at least the level of vice-president.
- ii. For a partnership or sole proprietorship by a general partner or the proprietor, respectively.
- iii. For a municipality, state, federal or other public agency by either a principal executive officer or ranking elected official.
- iv. For a military installation by the base commander or the person with overall responsibility for environmental matters in that branch of the military.
- b. All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph [a] of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
 - i. The authorization is made in writing by a person described in paragraph [a] of this provision;
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
 - iii. The written authorization is submitted to the Executive Officer.
- c. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

I. GENERAL PROVISIONS

1. This Order does not authorize violation of any federal, state, or local laws or regulations.

















- 2. Upon review of the flow conditions, habitat values, and beneficial uses of surface waters in the canyons/streams at the Landfill are not specifically designated in the Basin Plan. However, since these canyon/streams that are tributary to the Main San Gabriel Hydrologic Subarea of the Los Angeles San Gabriel Hydrologic Unit, the Regional Board finds that the beneficial uses identified in the Basin Plan for the Main San Gabriel Hydrologic Subarea apply to these tributary canyons/streams.
- 3. The Discharger shall comply with all the other applicable provisions, requirements, and procedures contained in the most recent version of 27 CCR and any future amendments.
- 4. The Discharger has a continuing responsibility for correcting any problems which may arise in the future as a result of waste discharged at the Landfill, and from gases and leachate that may be caused by infiltration or precipitation of drainage waters into the waste disposal units, or by infiltration of water applied to this property during subsequent use of the land or other purposes.
- 5. The Discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the CWC, any substances or parameters at this location.
- 6. The Discharger shall maintain a copy of this Order at the Landfill so as to be available at all times to Landfill operating personnel.
- 7. These requirements do not exempt the Discharger from compliance with any other current or future law that may be applicable. They do not legalize this waste management facility, and they leave and do not affect further restraints on the disposal of wastes at this waste management facility that may be contained in other

















statutes.

- 8. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements", adopted November 7, 1990 (Attachment 3) which is incorporated herein by reference. The Landfill continues to be subject to Regional Board Order No. 93-062 incorporating federal Resource Conservation and Recovery Act (42 USC {xe "42 USC\:§6901, et seq."}section 6901, et seq.) regulations, which are also incorporated herein by reference. If there is any conflict between provisions stated herein and the standard provisions, Regional Board Order No. 93-062, or federal regulations, the provisions stated herein will prevail.
- 9. The requirements adopted herein do not authorize the commission of any act causing injury to the property of another, nor protect the Discharger from liabilities under federal, state, or local laws.
- 10. The filing of a request by the Discharger for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any condition, provision, or requirements of this Order.
- 11. This Order does not convey any property rights of any sort, or any exclusive privilege.
- 12. The Discharger is the responsible party for these WDRs and any M&RP for the Landfill. The Discharger shall comply with all conditions of these WDRs. Violations may result in enforcement actions, including regional board orders, or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these WDRs by the Regional Board.
- 13. The Discharger shall within 48 hours of a significant earthquake event, provide an initial verbal assessment to the Regional Board of any earthquake damage at the Landfill. A detailed post-earthquake report describing any physical damages to the containment features, groundwater monitoring and/or leachate control facilities and a corrective action plan to be implemented at the Landfill shall be submitted to the Regional Board with thirty days of the earthquake event. A significant earthquake is herein defined as an earthquake event above Richter Magnitude 5.0 within a 100 kilometer radius of the property boundaries of the Puente Hills Landfill site, or as measured as a VI on the Modified Mercalli Scale.
- 14. The Discharger shall immediately notify the Regional Board of any flooding, slope failure or other change in Landfill conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.













- 15. The Discharger shall submit to the Regional Board and to the CIWMB evidence of financial assurance for postclosure maintenance, pursuant to 27 CCR, division 2, chapter 6. The postclosure period shall be at least 30 years. However, the postclosure shall extend as long as wastes pose a threat to water quality.
- 16. Within 90 days of the adoption of this Order, the Discharger shall submit to the CIWMB, in accordance with 27 CCR section 22222, assurance of financial responsibility in an amount acceptable to the Executive Officer for initiating and completing corrective action for all known or reasonably foreseeable releases from the Landfill.
- 17. The Discharger shall comply with all conditions of this Order and any additional conditions prescribed by the Regional Board in addenda thereto. Noncompliance with this Order constitutes a violation of the CWC and is grounds for:
 - a. enforcement action;
 - b. termination, revocation and reissuance, or modification of this Order; or
 - c. denial of a ROWD in application for new or revised WDRs.
- 18. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
- 19. This Order is not transferable to any person except after notice to the Executive Officer. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the CWC. The Discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage as described under Provision No. I.5 of this Order.
- 20. In accordance with CWC section 13263(g), these requirements shall not create a vested right to continue to discharge and are subject to rescission or modification. All discharges of waste into the waters of the state are privileges, not rights.
- 21. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
- 22. This Order becomes effective on the date of adoption by the Regional Board.

















- 23. This Order may be terminated or modified for cause, including, but not limited to:
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- a. Violation of any term or condition contained in this Order;
- b. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
- c. A change in any condition that required either a temporary or permanent reduction or elimination of the authorized waste discharge.
- 24. This Order in no way limits the authority of the Regional Board, as contained in the CWC, to require additional investigations and cleanups pertinent to this project. This Order may be revised by the Executive Officer as additional information from the project becomes available.
- 25. Failure to comply with the terms and conditions of this Order may result in imposition of civil liability against the Discharger by the Regional Board, either by the Regional Board or judicially by the Superior Court, in accordance with CWC section 13350 et. seq. and/or referral to the Attorney General of the State of California for such legal action as may be deemed appropriate.

J. RESCISSIONS

1. Except for violation enforcement purposes, Regional Board Order No. 90-046, adopted March 26, 1990, Order No. 91-035, adopted March 4, 1991, Order No. 93-070, adopted November 1, 1993, Order No. 94-103, adopted September 26, 1994, and Order No. 99-059, adopted March 26, 1999, are hereby rescinded. Because Order No. 93-062 also applies to other municipal waste landfills in the region, incorporating federal regulations, it is not rescinded.

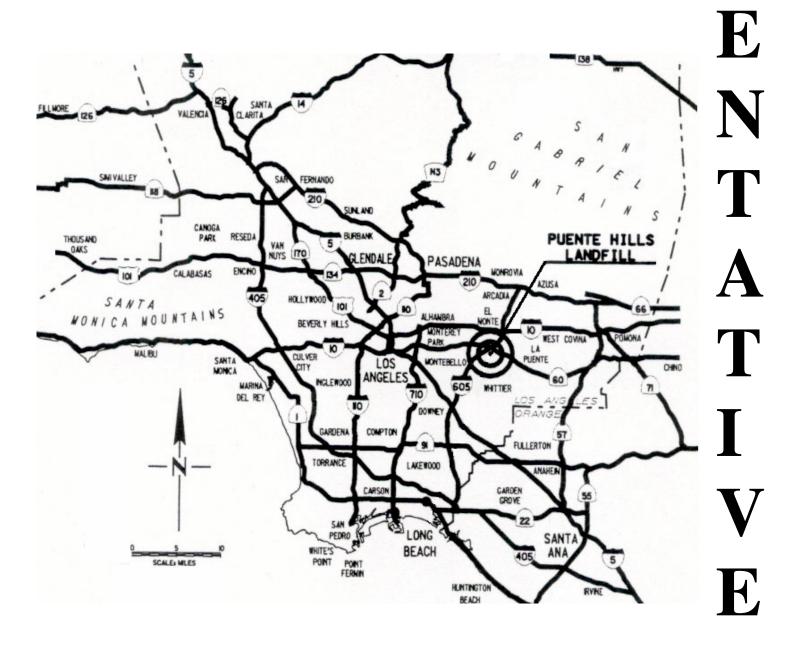
I, Jonathan S. Bishop, Executive Officer, do certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on March 9, 2006 October 6, 2005.

Jonathan S. Bishop
Executive Officer

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FIGURE 1: PUENTE HILLS LANDFILL - LOCATION MAP



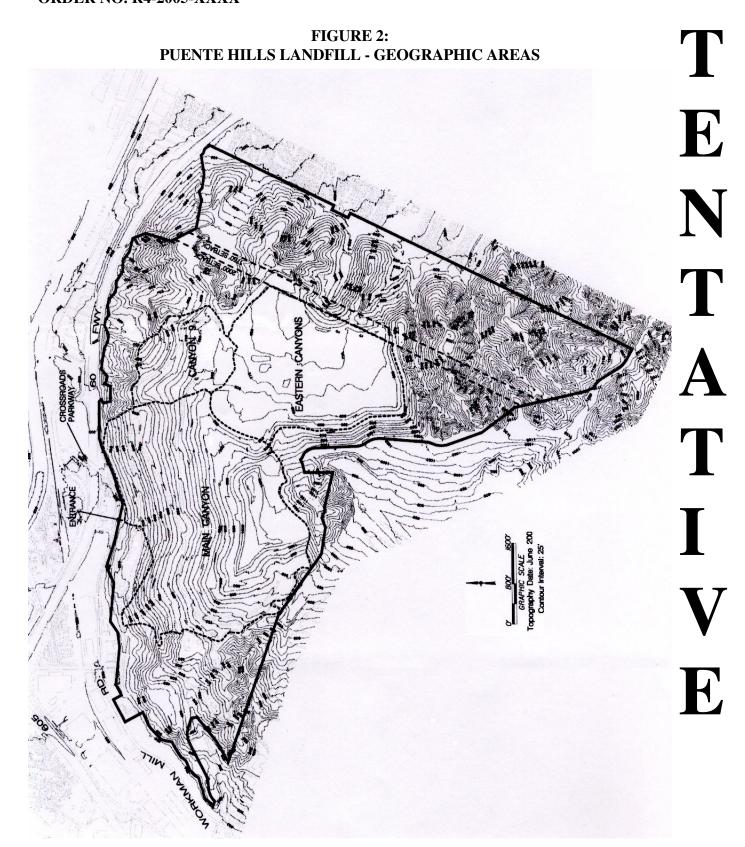
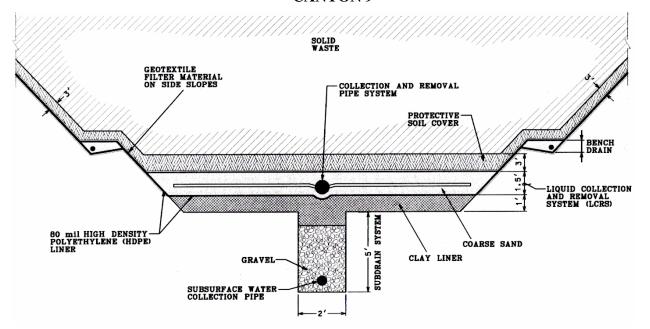


FIGURE 3: PUENTE HILLS LANDFILL – COMPOSITE LINER SYSTEMS

CANYON 9



EASTERN CANYONS

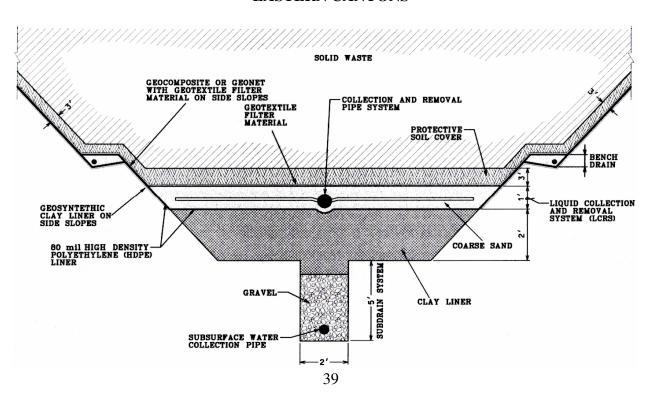


FIGURE 4: PUENTE HILLS LANDFILL – CLOSED AREAS

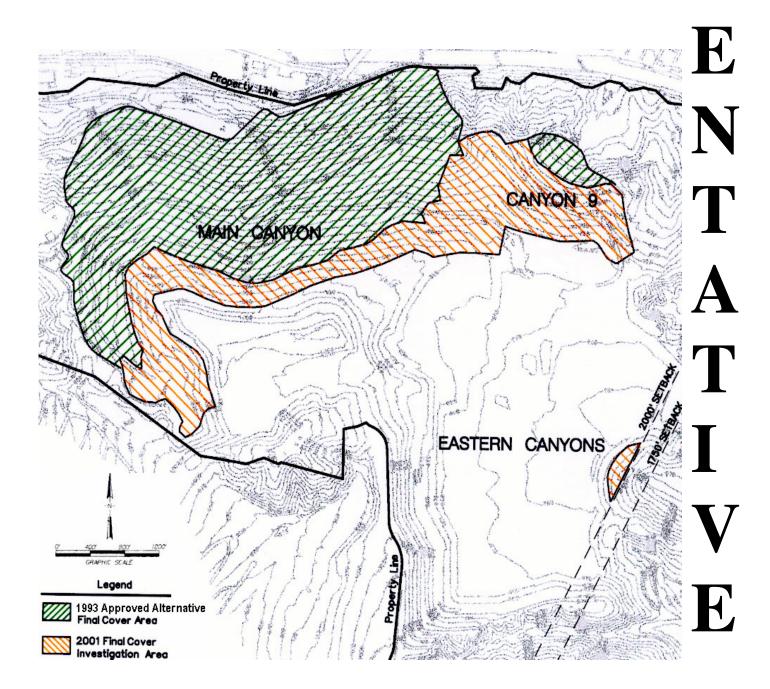
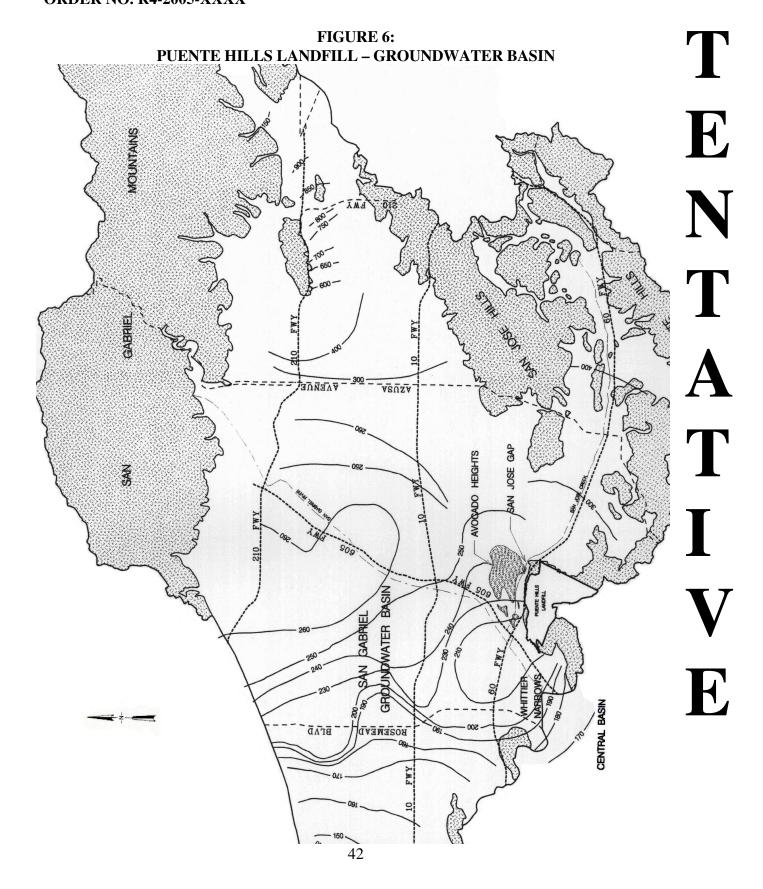
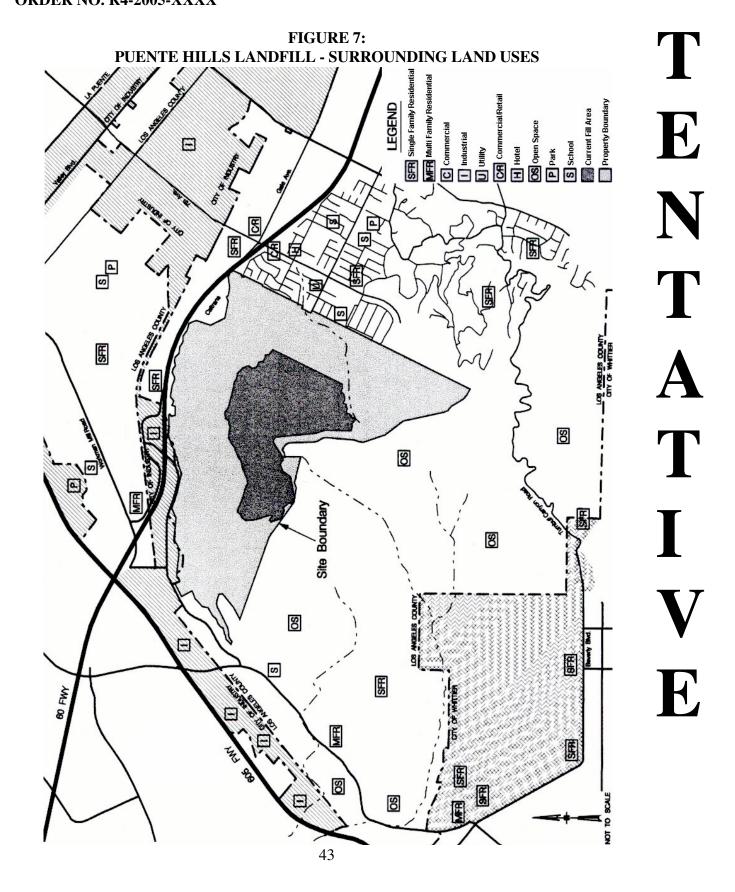


FIGURE 5: PUENTE HILLS LANDFILL - FILL PLAN FOR CONTINUED OPERATIONS AREA E N V E





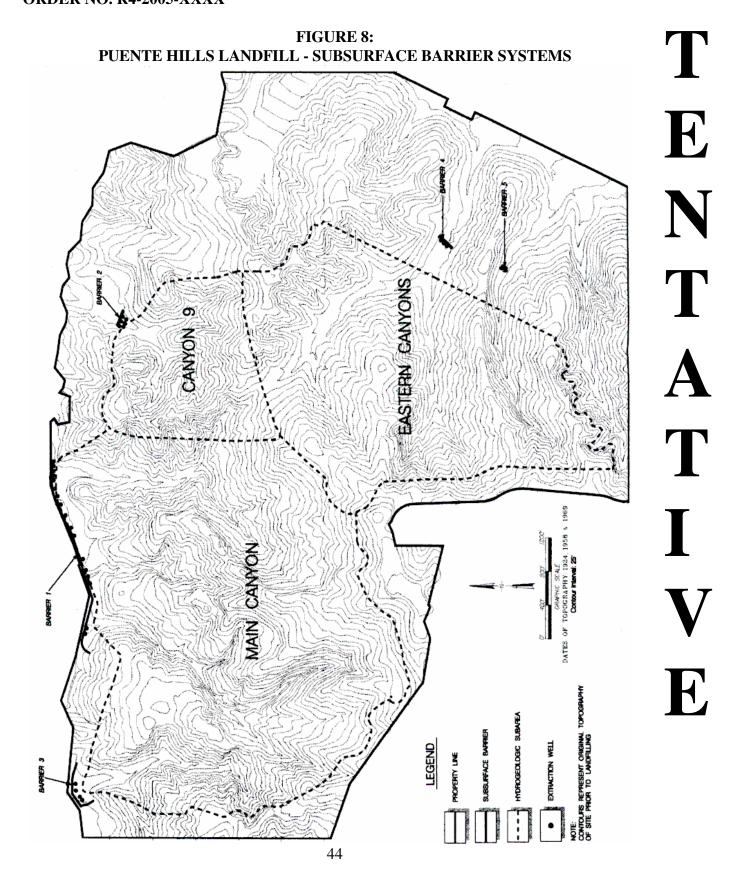
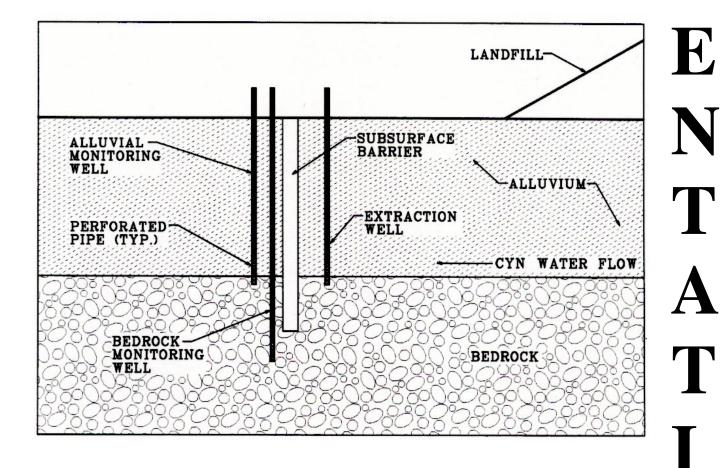
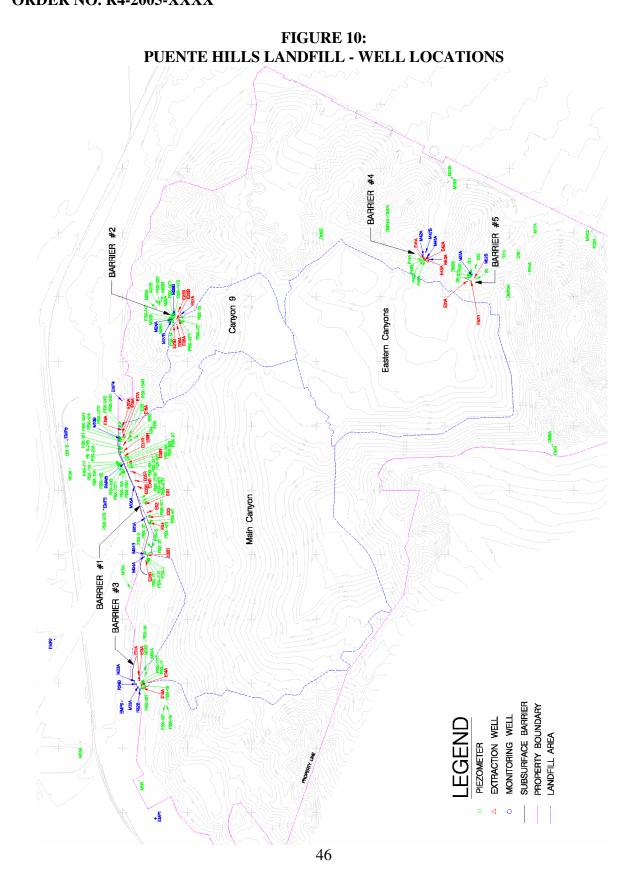


FIGURE 9: PUENTE HILLS LANDFILL – SUBSURFACE BARRIERS



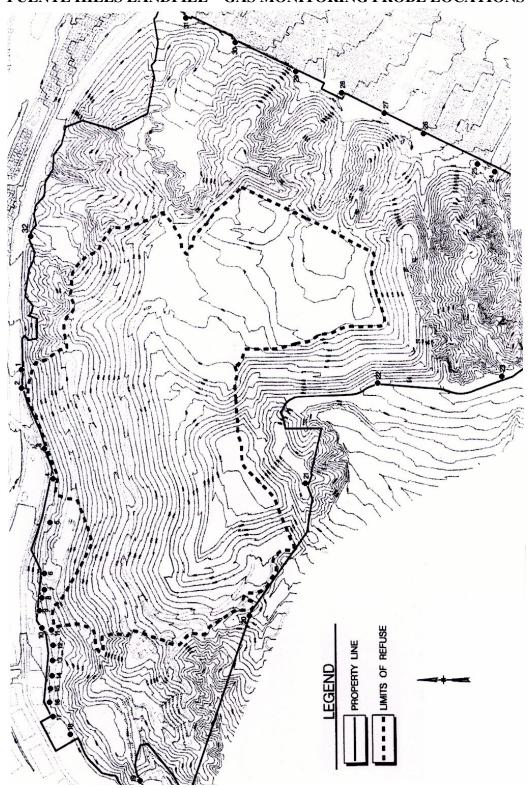


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FIGURE 11: PUENTE HILLS LANDFILL – GAS MONITORING PROBE LOCATIONS



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